

In the Claims:

Please amend the claims so as to read as follows:

1-25. (Canceled, without prejudice)

26. (Currently Amended) A base station for use in a space-division multiplex optical wireless local area network for simultaneously interconnecting more than one of a plurality of terminals associated with the wireless local area network to at least one other terminal associated with the wireless local area network, the base station comprising:
an angle diversity receiver; and
a multi-beam transmitter for outputting a plurality of beams carrying output information from said angle diversity receiver,
wherein the multi-beam transmitter includes a plurality of optical transmitters so as to form a plurality of different space cells each having a predetermined size respectively associated with corresponding ones of said beams, and each of the plurality of optical transmitters includes at least one LD or at least one LED as a light source; and
wherein said angle-diversity receiver includes a plurality of receiving elements separately associated with each respective one of said different space cells, and at least one of the plurality of receiving elements is positioned to receive input from each of said more than one of a plurality of terminals associated with the wireless local area network; and
wherein, in the multi-beam transmitter, directional half value angles Φ of each light source of each of the plurality of optical transmitters are set to specific angles different from each other, the directional half angles being represented by $\Phi = C \times \theta$ where C is a constant in the range from 0.70 to 1.00, and θ is an angle of each of the plurality of space cells each having a predetermined size.

27. Canceled, without prejudice.

28. Canceled, without prejudice.

29. Canceled, without prejudice.

30. (Previously Presented) A base station according to claim 26, wherein the angle-diversity receiver includes a lens system dedicated to reception having a spatial resolution higher than a spatial resolution of the plurality of space cells each having a predetermined size.

31. (Previously Presented) A base station according to claim 26, wherein a radius of a space cell provided by each of the plurality of optical transmitters is in a range from 20 cm to 100 cm at a predetermined maximum possible distance for communication.

32. (Currently Amended) A space-division multiplex optical wireless local area network for simultaneously interconnecting more than one of a plurality of terminals associated with the wireless local area network to at least one other terminal associated with the wireless local area network via a base station, the local area network comprising:

an angle-diversity receiver; and

a multi-beam transmitter for outputting a plurality of beams carrying output information from said angle diversity receiver, wherein the multi-beam transmitter includes a plurality of optical transmitters so as to form a plurality of different space cells each having a predetermined size respectively associated with corresponding ones of said beams, and each of the plurality of optical transmitters includes at least one LD or at least one LED as a light source; and

wherein said angle-diversity receiver includes a plurality of receiving elements separately associated with each respective one of said different space cells, and at least one of the plurality of receiving elements is positioned to receive input from each of said more than one of a plurality of terminals associated with the wireless local area network - and

wherein, in the multi-beam transmitter, directional half value angles Φ of each light source of each of the plurality of optical transmitters are set to specific angles different from each other, the directional half angles being represented by $\Phi = C \times \theta$ where C is a constant in the range from 0.70 to 1.00, and θ is an angle of each of the plurality of space cells each having a predetermined size.

33. (Previously Presented) A space-division multiplex optical wireless local area network according to claim 32, wherein each of the plurality of terminals includes an optical transmitter having at least one light source, the angle-diversity receiver has an optical filter for selectively attenuating light transmitted from the transmitter of the terminal, and means for easily removing the optical filter are provided.
34. (Previously Presented) A space-division multiplex optical wireless local area network according to claim 33, wherein each of the plurality of beams output from the multi-beam transmitter of the base station includes a spectrum component having a sufficient intensity different from the spectrum components of any one of wavelength bands used by each of the plurality of terminals.
35. (Previously Presented) A space-division multiplex optical wireless local area network according to claim 33, wherein each of the plurality of beams output from the multi-beam transmitter of the base station includes at least one wavelength band used by the plurality of terminals and a spectrum component having a sufficient intensity other than the at least one wavelength band.
36. Canceled, without prejudice

37. (Currently Amended) A base station according to claim 27, wherein the angle-diversity receiver includes a lens system dedicated to reception having a spatial resolution higher than a spatial resolution of the plurality of space cells each having a predetermined size.

38. Canceled, without prejudice.

39. Canceled, without prejudice

40. (Currently Amended) A base station according to claim 27, wherein a radius of a space cell provided by each of the plurality of optical transmitters is in a range from 20 cm to 100 cm at a predetermined maximum possible distance for communication.

41. Canceled, without prejudice.

42. Canceled, without prejudice.

43. (Previously Presented) A base station according to claim 30, wherein a radius of a space cell provided by each of the plurality of optical transmitters is in a range from 20 cm to 100 cm at a predetermined maximum possible distance for communication.